

I. Amendments to the Specification

Please amend Paragraphs 0022, 0028 and 0033 of the Specification as follows:

[0022] A polyethylene composition according to this invention is a melt blend of HDPE resins for use in manufacturing but not limited to corrugated polyethylene pipe, fittings and accessories. Applications for the polyethylene pipe, fittings and accessories include but are not limited to drainage, storm sewer, sanitary sewer, irrigation and industrial sewer applications. In brief, a method is disclosed for producing melt blended HDPE for pipe and fitting material having a density in the range of 0.945 to 0.955 grams per cubic centimeter, values of melt flow index according to ASTM D1238 less than 0.4 with enhanced physical properties and process characteristics. The blend may include virgin; reprocessed, wide specification, flake or regrind HMW LMW homopolymer and copolymer HDPE (5 to <50 %) as a minor component and HMW HDPE (>50 to 95%) as a major component. Methods of producing the compositions are presented. The method of selecting and blending the HMW HDPE copolymer, LMW HDPE homopolymer and LMW HDPE copolymer provides the corrugated HDPE pipe manufacturer with polyethylene compositions and the means to independently design physical properties and enhance processability while exceeding AASHTO's standard for ESCR.

[0028] The FRR is the ratio of the high load melt index (HLM) to the melt index (MI). it is well known that a low FRR value indicates narrow molecular weight distribution and high FRR values values indicate a wide molecular weight distribution.

[0033] It is preferred that the LMW HDPE homopolymer and copolymer components have significantly higher MI as compared to the unimodal and/or bimodal HMW HDPE copolymer to easily mix with the high viscosity melt and lower MI of the major component. This higher melt index also minimizes the amount of the minor component required to adjust MI of the HMW major component. The ESCR is lower less by utilizing significantly less LMW HDPE having higher MI values values of about 2 to 20 grams per 10 minutes. The consequence of the increase in the amount of LMW HDPE is large compared to an increase in MI. The use of higher MI values is preferable to adding more LMW HDPE. This relationship is believed to be counter to known conventions in the art.